

Syntactic Structure of Noun Phrases in Urdu and English

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Abstract

This research paper investigates the syntactic properties and patterns of noun phrases (NPs) in Urdu and English, focusing on pre-modification and agreement. Using a qualitative descriptive approach and the X-bar theory as a theoretical framework, the study compares the structures of NPs in both languages. Both Urdu and English utilize articles, demonstratives, possessives, numerals/quantifiers, adjectives, and nouns as pre-modifiers in NPs. However, there are notable distinctions in terms of agreement and inflection. While English demonstrates agreement between demonstratives and the number of the noun they modify, Urdu does not exhibit such agreement. Urdu possessive pronouns inflect based on gender, while English possessives remain consistent regardless of gender or number. Adjectives in Urdu inflect for gender and number, whereas English adjectives do not change form based on the noun they modify. Overall, this research contributes to the understanding of noun phrase structures in Urdu and English. The study also highlights the need for further research in post-modification, case marking, and word order within noun phrases in both languages.

Keywords: syntactic properties, noun phrases, pre-modification, Syntactic Structure

Introduction

Language is a tool for people to communicate and express their thoughts. It is crucial to have a comprehensive understanding of syntactic structures within a language to explore its linguistic and cognitive foundations. Every language in the world has syntactic hierarchy where smaller units combine to form larger units. The smallest building blocks of language morphemes combine to form words and words

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merge together to form phrase which consist of a head word and modifiers or complements. Phrases combine to form clauses which can either function independently as a complete sentence or as components within larger/complex sentence structures. Understanding the intricacies of this syntactic hierarchy within a language is essential for the formation of grammatically correct and meaningful sentences. Therefore, the objective of this study is to analyze the intermediate syntactic construction between a word a sentence i.e. phrase. There are different types of phrases including verb phrase (head is a verb), adverbial phrase (head is an adverb), prepositional phrase (head is a preposition) and nominal /noun phrase (head is a noun). The focus of this study is to unravel and compare the syntactic structure of Noun phrases in Urdu and English.

According to Quirk and Greenbaum (1973), a Noun Phrase (NP) may consist of only a single noun or pronoun, or a cluster of words having noun as a head, it may consist of two words or a long complex cluster of wording such as article, an adjective, another noun or even a clause (as cited in Ali, 2023). The NP holds an inevitable importance in determining the grammatical structure and conveying meaning. This research aims to examine different aspects of Noun Phrase structure in Urdu and English including pre-modification and agreement. Urdu and English sentences will be analyzed and X-bar theory will be employed to explain the patterns and structure of NPs.

The results of this study will expand syntactic knowledge of Urdu and English. This research has potential implications for language teaching, translation and computational linguistics.

The syntactic structure of noun phrases in Urdu and English has not been extensively studied in a comparative manner using the framework of X-bar Theory. This research gap hinders our understanding of the similarities and differences between Urdu and English in terms of pre-modification and agreement.

Methodology

This research paper used a qualitative descriptive approach to compare the structure of Noun Phrases (NPs) in Urdu and English. Urdu and English textbooks were used as data sources. The study is based on the X-bar theory, as theoretical framework, which helped to analyze how phrases are structured.

❖ X-bar Theory

X-bar theory is a significant and central concept in syntactic theories that explain the structure of phrases. Noam Chomsky (1970) introduced this theory, which proposes that a phrase consists of a head (X) surrounded by other constituents, whether obligatory or not.

The theory is based on two main principles:

- **Headedness Principle:** Every phrase must have a head as an obligatory component.
- **Binarity Principle:** The phrase branches into two nodes.

According to the X-bar schema, a phrase (XP) comprises the following elements:

Specifier: This is a pre-modifier of the head (X) that modifies or specifies the meaning of the phrase. It may or may not be part of the phrase.

Head: [obligatory] This is the core of the phrase, determining its form, characteristics, and structure.

Complement: This is a post-modifier argument that adds to the meaning of the head.

Adjunct: This is an optional modifier for the head, providing additional comments or information.

The lexeme in the head position is represented as X^0 or sometimes referred to as Zero projection. When the head is combined with a complement, it forms a single x-bar (X^- or X'), and the same process is repeated when an adjunct is added. A head combined with a complement or adjunct is called an intermediate projection. The intermediate projection is then combined with a specifier, forming a double-bar X phrase known as maximal projection. The double X-bar phrase is denoted as X'' .

Review of the Literature

Ba'dulu (2008) explains that a noun phrase is a group of words where the main element is a noun. It consists of two essential parts: a determiner, which can be an article, possessive pronoun, numeral, or demonstrative, and a head, which is the

noun itself. Jackson (1985) suggests that the English noun phrase (NP) can be constructed using a pre-modifier, a head, and a post-modifier.

Ali and Mualimin (2023) studied the Urdu nominal phrase using Chomsky's X-bar theory. The researchers collected data from "Ghalib's letter to Alauddin Alai" and examined it in the context of X-bar theory. The researchers used a method that describes and analyzes the phrase in a qualitative way. It was observed that Urdu grammar does not have a distinct category specifically for nominal phrases, but the researchers identified constructions that function as nominal phrases. In Urdu, nominal phrases are often formed by combining a noun with adjectives or numerals. Although the Urdu nominal phrase doesn't align perfectly with the X-bar schema, the researchers suggest that the X-bar theory can be adapted and modified for its application in Urdu and other languages. This flexibility is crucial for facilitating comparative translation processes across different languages.

In a study by Junaid (2018), the goal was to evaluate how well students could construct English Noun Phrases and identify what factors led to mistakes in their construction. The study included 40 students studying English in their fifth semester. Tests were used to gather data, which was then analyzed using descriptive statistics. The results showed that students used 32 different patterns to construct Noun Phrases, both accurately and with errors. These patterns included identifiers, adjectives, noun modifiers, quantifiers, prepositional phrases, participle clauses, conjunctions, and indefinite clauses, with each pattern starting with a noun. The most accurate pattern was identifier+Head, while the pattern with the most errors was quantifier+Head. The study also found 11 categories of errors, such as misused identifiers, quantifiers, nouns, and singular forms, as well as instances of missing or incorrect word order. The most common error was the misuse of singular forms.

Another study ((Lan et al.,2022) investigated the use of noun phrases in academic writing among L1 and L2 English users. Noun phrase complexity was analyzed using 11 noun modifiers. The results showed that L1 essays had diverse noun phrase patterns, while L2 essays displayed compressed structures. Qualitative analysis revealed frequent use of phrasal modifiers in L2 essays. The findings have pedagogical implications for academic writing courses for both L1 and L2 students. The study titled "A Syntactic Analysis on Noun Phrases Used in English Songs by Ed Sheeran Album" (2020) examined Noun Phrases using Jumanto's theory as a framework. The focus of the study was on the discussion and coding of different

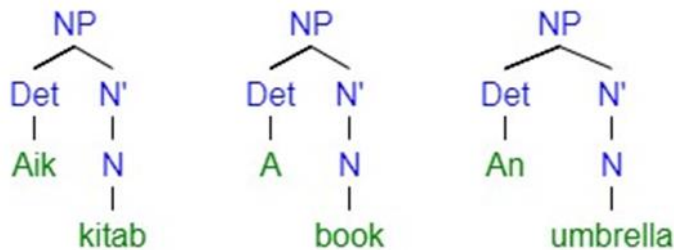
types of noun phrases. The analysis involved 93 lyrics from five selected songs in Ed Sheeran's English song album, resulting in the identification of 118 noun phrases. Out of these, 92 were premodifiers (78%), 4 were postmodifiers (3.4%), and 23 had both premodifiers and postmodifiers (18.6%). The most frequently used type of noun phrase in the English songs was premodifiers, accounting for 78% of the data. The findings suggest that Ed Sheeran's album includes various types of noun phrases. The application of Jumanto's theory provides a straightforward way to represent noun phrases.

The existing literature lacks a comparative study on Urdu and English noun phrases, creating a significant research gap. This study aims to fill this gap by conducting a comparative analysis of noun phrases in Urdu and English. By exploring the similarities and differences in their structures and usage, the study seeks to enhance our understanding of noun phrase constructions in Urdu and English.

Analysis and Discussion

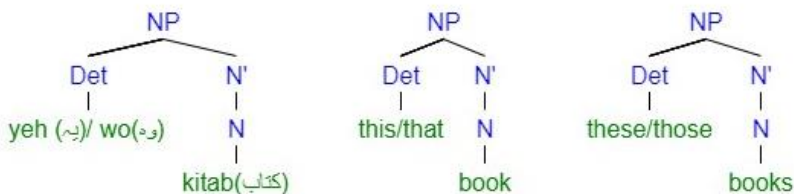
❖ Articles as pre-Modifiers

In both Urdu and English, noun phrases can be pre-modified by identifiers such as articles, demonstratives, and possessives.



In above tree diagrams, the specifier position is occupied by the articles (aik, a , an) they merge with noun head to form NP. In Urdu, there is only one article, which is "aik." It is used for both consonant and vowel sound nouns. In English, the indefinite article "a" is used before consonant sound nouns, while "an" is used before vowel sound nouns. The definite article "the" is used to refer to a particular noun. In Urdu, the demonstrative "yeh" is used to refer to a specific noun. It functions similar to the definite article in English. In English, the definite article "the" is primarily used to indicate a specific noun, serving a similar purpose to the Urdu demonstrative "yeh."

❖ **Determiners as Pre-Modifiers**

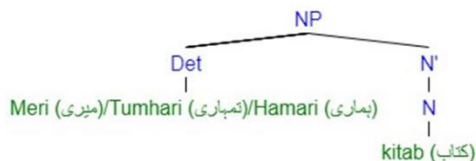


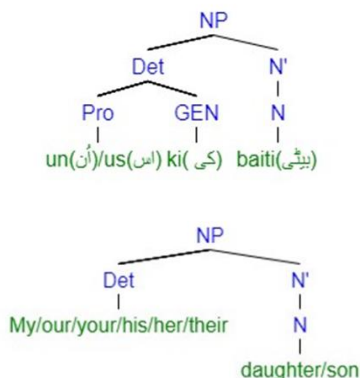
In both Urdu and English, demonstratives can be used as premodifiers. The above tree diagrams show how specifiers (determiners) merge with head (noun) to construct NP. In both Urdu and English, demonstratives like "this," "that," "these," and "those" are used to point out or refer to specific objects or entities. However, there is a difference between Urdu and English when it comes to how demonstratives agree with the nouns they modify.

In English, demonstratives inflect or change form based on the number of the noun they are associated with. For example, we say "this book" when referring to a single book and "these books" when talking about multiple books. The demonstrative changes from "this" to "these" to match the plural form of the noun it modifies.

On the other hand, in Urdu, demonstratives do not exhibit this agreement phenomenon. The demonstratives "yeh" and "wo" are commonly used in Urdu to mean "this" and "that" respectively. Whether the noun is singular or plural, the demonstratives remain the same. For instance, we say "yeh kitab" for "this book" and "yeh kitabein" for "these books," without any change in the form of the demonstrative. To summarize, the main difference between Urdu and English with regards to demonstratives lies in their agreement with the number of the noun they modify. English demonstratives inflect to match the noun's number (singular or plural), while Urdu demonstratives do not change regardless of whether the noun is singular or plural.

❖ **Possessives as Pre-Modifiers**





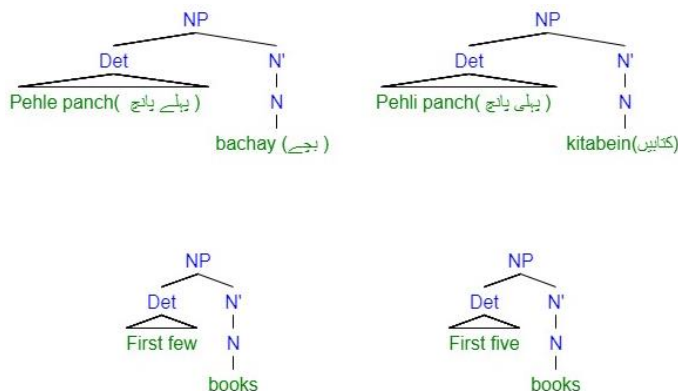
In both Urdu and English, possessive pronouns can be used as premodifiers to indicate ownership or possession. They take position of specifier and merge with noun head to form NP. However, there are some differences between the two languages in terms of how possessives are formed and inflected.

In English, possessive pronouns such as "their," "his," "her," "my," and "our" remain consistent regardless of gender or number of nouns modified by them. For example, we say "their daughter," "their son," regardless whether the noun is feminine or masculine.

In Urdu, possessive markers are used to indicate possession, but their form varies based on the person and gender. In Urdu, possessive pronouns inflect according to the gender of the noun they modify. For the first and second person, the possessive pronouns themselves undergo inflection. For example, we say "hamara baita" for "our son" and "hamari baiti" for "our daughter." The pronouns "hamara" and "hamari" change based on the gender of the possessed noun. On the other hand, for the third person, the genitive case markers "ka" and "ki" inflect based on the gender of the noun. We use "us ka baita" for "his son" and "us ki baiti" for "her daughter." Here, the possessive markers "ka" and "ki" adjust their form to match the gender of the noun being possessed. Moreover, Urdu possessive pronouns undergo different inflection when they merge with masculine, plural noun, for example: hamara baita (our son) and hamare baite (our sons). This does not happen when the possessed noun is feminine, for example: hamari baiti (our daughter) and hamari baitian (our daughters).

To summarize, in Urdu, possessive pronouns in the first and second person inflect based on the gender of the noun they modify. In the third person, the genitive case markers "ka" and "ki" inflect according to the gender of the noun being possessed. The inflection includes adding "aa()" for masculine and "i(ی)" for feminine and 'e (ے)' for plural masculine nouns.

❖ Numerals/Quantifiers as Pre-Modifiers



Numeral and quantifier can also be used as premodifiers in both Urdu and English. However, there are some differences in how cardinal and ordinal numerals are used, as well as how ordinals are inflected in Urdu but not in English.

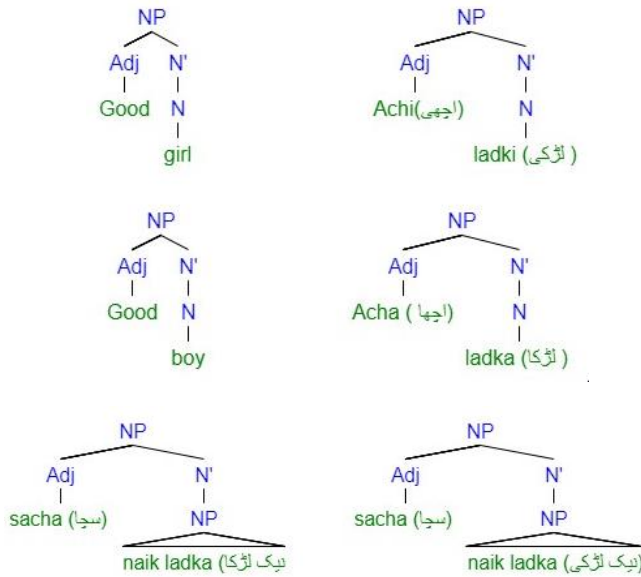
Cardinal numerals represent the quantity or number of nouns. They are used to answer the question "how many?" Examples include "one," "two," "three," etc. In both Urdu and English, cardinal numerals can be used as premodifiers to indicate the quantity of a noun. For example, "three books" or "teen kitaben" in Urdu. Ordinal numerals indicate the position or order of nouns in a sequence. Examples include "first," "second," "third," etc. In both Urdu and English, ordinal numerals can be used as premodifiers. For example, "the second chapter" or "dosra baab" in Urdu.

When using ordinal and cardinal numerals together, there is a specific order they follow. The ordinal numeral comes before the cardinal numeral. For example, "first five books", * five first books.

In Urdu, the ordinal numeral inflects according to the gender of the noun it modifies. For masculine nouns, the ordinal ends in 'aa' and for feminine nouns, it ends in "-i." For example, "doosra ladka" (second boy) and "doosri ladki" (second girl). In English, there is no inflection of ordinals based on gender. The same form is used regardless of the gender of the noun. For example, "the second girl/boy" is

used for both masculine and feminine nouns. Urdu ordinals use ending inflection ‘-e(ے) while modifying masculine plural noun, for example: pehle kuch ladke (first few boys). To summarize, both Urdu and English use cardinal and ordinal numerals as premodifiers. However, Urdu has inflection in ordinals based on the gender and number of the noun, while English does not.

❖ Adjectives as Pre-Modifiers



Both Urdu and English allow nouns to be pre-modified by adjectives. The adjectives occupy place of specifier and merge with N, NP to form noun phrases. However, there is a difference in how adjectives inflect in the two languages.

In Urdu, adjectives ending in "aa" do inflect to match the number and gender of the noun they modify. When modifying a singular masculine noun, the adjective takes the "aa" ending. For example, we say "sacha ladka" for "truthful boy" and "acha ladka" for "good boy". When modifying a plural masculine noun, the adjective ending changes to "e." For example, we say "sache ladke" for "truthful boys" and "ache ladke" for "good boys".

However, for both singular and plural feminine nouns, the adjective ending remains the same as "i." For example, we say "sachi ladki" for "truthful girl" and "achi ladki" for "good girl".

for "good girl." There is no unique inflection for feminine plural nouns, so we use the same form of the adjective as for singular feminine nouns. For example, we say "sachi ladkiyan" for "truthful girls" and "achi ladkiyan" for "good girls".

In English, adjectives do not inflect based on the gender or number of the noun they modify. For both masculine and feminine singular and plural nouns, the adjective remains the same. For example, we say "good boy/ boys" and "good girl/girls". There is no change in the adjective "good" based on the gender and number of the noun it modifies.

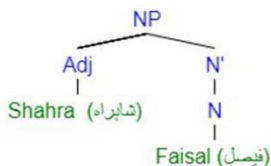
To summarize, in Urdu, adjectives ending in "aa" inflect to match the number and gender of the noun being modified. In English, adjectives do not change based on gender or number, and they remain the same when modifying nouns of different genders and numbers. To summarize, in Urdu, adjectives ending in "aa" inflect to "e" when modifying plural masculine nouns, while there is no unique inflection for feminine plural nouns, and the "i" ending remains the same as for singular feminine nouns.

❖ **Nouns as Pre-Modifiers**



When it comes to nouns modifying other nouns, both Urdu and English employ a similar structure. In this construction, one noun functions as a modifier or specifier of another noun, providing additional information or specifying a particular type or category. When a noun modifies another noun, it is often referred to as an adjective. In this context, the modifying noun functions as an attributive adjective, providing additional information about the noun it modifies. It serves a similar purpose to traditional adjectives in describing or specifying the characteristics, qualities, or relationship of the modified noun. For example, in English, we might say "bamboo" modifies "trees" to indicate that it is special kind of tree. Similarly, in Urdu, we could say "wazire azam" which modifies "Imran Khan " to convey additional information about him.

While traditional adjectives in English and Urdu typically exhibit inflection for gender, number, and sometimes case, the modifying nouns in the context of noun-noun modification usually remain in their base form and do not inflect. Instead, they function as adjectives by indicating the relationship between the modified noun and the modifying noun. Consider following example: 'aa' does not inflect to agree with masculine noun;



In both languages, the modifying noun typically precedes the noun it modifies. The order may vary slightly in certain cases or for emphasis, but generally, the modifying noun comes before the modified noun.

Conclusion

In conclusion, this research paper aimed to explore the syntactic properties and patterns of noun phrases (NPs) in Urdu and English, specifically focusing on noun modification and agreement. The study used a qualitative descriptive approach and applied the X-bar theory as the theoretical framework for analyzing the structure of NPs. The findings revealed several similarities and differences between the two languages in terms of the pre-modification of noun phrases.

Both Urdu and English allow pre-modification of noun phrases using articles, demonstratives, possessives, numerals/quantifiers, adjectives, and nouns. In terms of articles, Urdu has a single article "aik" that is used for both consonant and vowel sound nouns, while English uses "a" before consonant sound nouns and "an" before vowel sound nouns. The definite article "the" in English corresponds to the Urdu demonstrative "yeh" in indicating a specific noun.

When it comes to demonstratives, English demonstratives inflect to match the number of the noun they modify, while Urdu demonstratives "yeh" and "wo" do not change regardless of noun number. Possessives in Urdu inflect based on gender and person, whereas English possessive pronouns remain consistent regardless of gender or number.

Both languages use cardinal and ordinal numerals as pre-modifiers, but Urdu ordinals inflect based on gender, while English ordinals do not. Adjectives in Urdu inflect based on gender and number, while English adjectives remain the same for all nouns.

In noun-noun modification, both Urdu and English employ similar structures, with the modifying noun preceding the modified noun. The modifying noun functions as an attributive adjective, providing additional information about the noun it modifies.

Overall, this research provides valuable insights into the syntactic similarities and differences between Urdu and English in terms of noun phrase modification and agreement. It highlights the importance of studying these linguistic features to enhance our understanding of language structures and cross-linguistic variations.

Based on the limitations of this study, it is recommended that future studies should explore the role of post-modifiers in noun phrases in Urdu and English. Investigating the syntactic structures and patterns of post-modification would provide a more comprehensive understanding of noun phrase construction in these languages.

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Article Information:

<i>Received</i>	30-Dec-2025
<i>Revised</i>	2-Feb-2026
<i>Accepted</i>	2-Mar-2026
<i>Published</i>	30-Mar-2026

Declarations:

Author's Contribution:

- **All Authors** **Conceptualization, and intellectual revisions, Data collection, interpretation, and drafting of manuscript**
- The author agrees to take responsibility for every facet of the work, making sure that any concerns about its integrity or veracity are thoroughly examined and addressed

• **Conflict of Interest:** NIL

• **Funding Sources:** NIL

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